

# **Analysis of Psychophysiological Stress Response in Higher Education Students Undergoing Clinical Practice Evaluation**

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## **Abstract**

The aim of this study was to analyze the psychophysiological response of Physiotherapy degree students during a complete clinical practice as well as their psychological profile in relation to coping style in stressful situations, and its impact on academic performance. We analysed in 15 students heart rate variability (HRV) to analyse autonomic modulation in three moments during the entire clinical practices of 3 months (4 h per day, 3 days per week), first session, middle session and last session; perceived stress, personality, life engagement, cognitive flexibility before starting the clinical practice the academic performance after the clinical practice. Results based on HRV and related indexes parameters fail to indicate the expected autonomic adaptation during the practice. A complete clinical practice of Physiotherapy degree students did not produce an habituation process since a high sympathetic autonomic nervous system modulation was measured in the beginning, at the middle and at the final of the clinical practice. Below-average scores are presented in a personality factor associated with traditional and non-adaptive coping styles that could explain the non-habituation of the students. Finally, none of the analyzed indexes has been able to relate to academic performance.

Keywords:

Autonomic modulation, Stress, HRV, Personality, Psychology